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Project Report

BRITISH COLUMBIA FINANCIAL REVIEW: THE ISSUE OF LOANS, INVESTMENTS, ACCOUNTS RECEIVABLE, AND LOAN GUARANTEES

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Executive Summary—Loans, Investments, Accounts Receivable and Loan Guarantees

This paper examines the policy and administrative issues raised by the government's use of loans, accounts receivable, and loan guarantees.

It finds that, since 1986, the government made increasing use of loans and loan guarantees instead of grants to provide incentives to business and carry out other programs. At the same time the terms of many of these loans were so concessionary that they were in fact grants. For example, the Province operated a dozen loan programs with loan losses as high as 100 per cent, eight of them more than 25 per cent.

In a number of cases, the control function and approval process normally exercised by Treasury Board involved elected officials to a greater degree than might be expected. In at least two cases examined, the Premier and other Cabinet ministers were involved in the granting of loans which were outside established program guidelines but in conformance with legislated requirements. The Province was subsequently unable to recover its investment on some of these loans.

A number of situations were found where government collection policies were not achieving prompt collection of accounts. For example, uncollected motor vehicle fines have grown from $9 million at March 31, 1991 to about $33.3 million at year end and are estimated to be increasing by approximately $3 million per month. Court fines now overdue require an additional $22.5 million provision.

Loan guarantees have been structured to provide a profit for commercial lenders while the Province has provided these guarantees at no cost and assumed all the risk. Loan guarantees have not been effectively monitored and the pay out rate by the Province is 54 per cent on commercial loan guarantees.

The report concludes that using loans and guarantees to provide payments that are really grants generates significant hidden costs, adding to the Province's actual expenditures.

It is recommended that:

- The March 1992 expenditures should include an additional provision of $316 million for losses on loans, loan guarantees, and accounts receivable.
- The carrying value of loans with generous repayment and low interest terms should be reduced by about $130 million to reflect the current financial value of such concessionary loans.

- The practice of making "ad hoc" business loans which are not within the guidelines of established programs should be significantly reduced and replaced by amended program design.

- The practice of using loans and guarantees when amounts are not expected to be collected should be stopped: where warranted they should be grants.

- The coordination of the loan administration function should be reviewed to confirm whether or not centralization of it in the Loan Administration Branch is the most effective system of management and collection.

- The current student loan remission program should be revised to eliminate the incentive to maximize borrowing.

The Issue of Loans, Investments, Accounts Receivable, and Loan Guarantees

A. Introduction and Summary

Traditionally, government has used financial incentive programs to encourage development within the province. For example, business activity is encouraged through the many programs of the Ministry of Economic Development, Small Business and Trade. Also programs are used to encourage further education. By providing the B.C. Student Assistance Program, students in British Columbia are encouraged to obtain post-secondary education.

A variety of financial incentive mechanisms are available to achieve government policy objectives. Some of the more frequently used incentives are grants, loans, loan guarantees and tax incentives.

To a large extent, the different financial incentives are interchangeable. The choice of which form of financial incentive to use depends very much on government policy.

The use of loans, investments and guarantees has grown significantly over the past few years. This is largely a reflection of a policy shift in British Columbia away from non-repayable grants and in favour of repayable loans.

In carrying out this review, we have not probed into the role of government in making loans for policy purposes, but, what we have found suggests the management and control of loans, account receivable and guarantees has resulted in a larger cost than is currently reflected in the accounts through uncollectible and uncollected account balances. In particular we found:

- Many of the loans in the government's portfolio are more in the nature of grants, since they are not expected to be recovered. Accounting for these loans as recoverable financial assets, rather than as expenditures, has the initial effect of overstating the assets and understating the deficit. In the year the loans are subsequently considered uncollectible, they are then treated as expenditures and thus increase the deficit at that time. The effect can be substantial, as evidenced by the large adjustment proposed for the current year's accounts.

- The use of loans as an assistance vehicle brings with it the administrative effort and costs associated with loan administration. These costs are not

recovered from the borrower, nor are they taken into account when the loan is made. In effect, there are substantial "hidden costs" associated with loan programs, especially when the beneficiary of the loan had to be in poor financial condition to qualify for the loan.

- Loan administration has been centralized and collection functions have improved. However, program improvement should be made to reduce the number of "ad hoc" loans where direct involvement of elected officials is required. There are also a number of loans not collectible because of a lack of collection activity.

- To bring the value of loans in line with their more realistic value, we recommend an increase in the current year's provision against the loan and debt portfolio of $316 million. In addition, we believe that a number of loans, or a portion of loans, are really grants because of the low interest rate or long-term of the loan and recommend an accounting policy change to treat them as such. The change to accounting policies recommended in our earlier report on this subject will require a further adjustment of $130 million to reduce the carrying value of those concessionary loans.

B. Background

1. Loans and guarantees

A large number of ministries use loan and related programs for policy purposes. As a result, the dollar value of portfolios created by the various government programs is substantial. Exhibit I sets out those ministries with significant portfolios with an estimate of the amounts outstanding at October 31, 1991.

Exhibit I
Estimate of portfolios at October 31, 1991 ($ millions)

Ministry	Loans and Investments	Loan Guarantees	
Advanced Education, Training and Technology	$33.0	$122.4	
Agriculture, Fisheries & Food	15.5	4.5	
Economic Development, Small Business & Trade	264.5	18.4	
Energy, Mines and Petroleum Resources	25.0	-	
	$338.0	$145.3	$483.3

The development of specific programs is the responsibility of the ministries. Treasury Board performs a control function by reviewing prepared programs and specific requests and in some cases making recommendations to the Minister of Finance and Corporate Relations or to Cabinet.

Once the programs are established, the program ministries are responsible for delivery and for controlling the advance of funds under the specific programs. In practice, certain loans have been made outside established program rules because they do not meet the criteria of any existing program. Such loans are to be expected when the type of support or amount required has not been contemplated by the development of a program. These are known as "ad hoc" loans. "Ad hoc" loans are subject to the same approval process as loans that are made through established programs. After being approved by Treasury Board, they are recommended to the Ministry of Finance and Corporate Relations or the Cabinet. Disbursement is handled by the program ministries.

After funds have been advanced, management of the loan portfolio is handled in one of two ways. In a number of cases, the portfolio management function and related collection activity is transferred to the Ministry of Finance and Corporate Relations, Loan Administration Branch. The transfer of responsibility is made by protocol agreements between the Loan Administration Branch and the program ministry. In other cases, portfolio management and collection is continued within the program ministry.

Recommendation

There appears to have been significant improvement in the management of loans since the introduction of the Loan Administration Branch. However, we observed some overlap, as well as a lack of coordination between loan granting ministries and the Loan Administration Branch. We believe that this should be examined with a view to confirming whether or not centralization of the administration function is most appropriate. A review should be undertaken to ensure that an effective system of management and collection is in place.

2. Accounts receivable

At any point in time, the government is owed a significant amount from a variety of revenue sources. At March 31, 1991, the General Fund Financial Statements indicated accounts receivable, comprising the assessments set out in Exhibit II.

Exhibit II
Schedule of accounts receivable at March 31, 1991 ($ millions)

Various taxes receivable (social services tax, tobacco tax, mineral land tax, timber royalties, etc.)	$ 813.0
Ministerial accounts receivable (court fines, motor vehicle fines, etc.)	313.0
Crown corporations and agencies	15.0
Accrued interest	102.0
	1,243.0
Less: Provision for doubtful accounts	(81.0)
	$ 1,162.0

During our review, we encountered a number of situations where government collection policies were not achieving the prompt collection of accounts. The lack of collection appears to relate to unclear assignment of accountability and the lack of collection resources in the form of personnel and systems.

An example that illustrates this point is the magnitude of accounts receivable for motor vehicle infractions. In 1990, the government introduced a policy of monetary fines for motor vehicle infractions, supplementing the "points" system. This change in policy generates a substantial amount of revenue but, because the legislation called for an early implementation date, a proper system of collection is not yet in place. The growth trend in the amount of motor vehicle fines gives a clear illustration of the dimension of this problem. The amount owed to the government for motor vehicle fines was estimated to be approximately $9 million at March 31, 1991. The amount of motor vehicle fines receivable at January 1, 1992 is estimated to be $33.3 million and it is increasing at approximately $3 million per month.

Another example which illustrates the point is the amount of court fines and penalties receivable by the Ministry of Attorney General. Exhibit III below shows an analysis of the fines and penalties receivable at March 31, 1991, along with estimates of provisions for doubtful accounts.

Exhibit III
Analysis of court fines and penalties receivable at March 31, 1991 ($millions)

Type	Accounts Receivable	Estimated Percentage Allowance	Estimated Provision
Current fines	$ 3.9	20	$ 0.8
Overdue fines	53.4	35	18.7
Warrants of committal	2.5	60	1.5
Certificates	0.9	90	0.8
Total	$ 60.7		$ 21.8

The amount of overdue fines at October 31, 1991 was estimated to be $51.5 million. There is little detailed information available on the breakdown of the overdue fines. However, the amount overdue has not changed substantially from March 31, 1991 to the date of the last available information. It is our view, therefore, that the estimated provision on overdue fines, in particular, should be substantially higher. We believe that, based on recent collection performance, a prudent, conservative provision would be 80 per cent. This would require an additional provision of $22.5 million.

The difficulty in effectively collecting amounts due appears to be a pervasive problem across government, partly as a result of the difficulties ministries face in obtaining adequate resources (as identified in the Financial Controls and Revenue issue papers). We believe that a number of ministries having collection difficulties should be examined with a view to centralizing the collection function and, potentially, making this function operate more efficiently and effectively. In this manner, there could be a concentration of collection expertise, which would enhance the effectiveness of accounts receivable collection. The approach would be similar to that followed with loans and guarantees where the Loan Administration Branch applies experienced loan and collection managers to the administration of the amounts due.

Recommendations

a) Ministry of Attorney General

The introduction of monetary fines for motor vehicle infractions has necessitated a requirement to develop adequate policies and procedures to manage the collection process.

In addition, there are substantial amounts due to the government in respect of overdue court fines.

Therefore, a review should be undertaken to ensure that an effective system of collection is in place.

b) Ministry of Finance and Corporate Relations

A new proposed federal Bankruptcy Act is expected to be passed shortly and is expected to alter the province's current priority in respect of certain consumer taxes such as Social Services Tax, Tobacco Tax, etc. As a result, the Ministry should consider modifying the remittance policies to reduce the exposure to non-collection of tax revenue from bankrupt businesses.

Therefore, a review should be undertaken to ensure that an effective system of collection is in place.

C. Valuation of loans, investments and accounts receivable

Loans and investments are considered to be financing transactions that when made as such, do not directly impact on government expenditures. Similarly, loan guarantees do not directly impact on government expenditures, except for a provision which is made in the year the guarantee is issued, based on the loss experience of the guarantee program. The extent of other government guarantees is disclosed by way of a note to the government's financial statements, until there is an expected payout when it is then treated as an expenditure.

However, if loans and investments come to be considered uncollectible, they have a direct impact on government expenditures. The provision for loss is considered an expenditure and therefore, increases the deficit. This is why the issue of valuation and collectibility is so relevant to the deficit reduction process.

Accounts receivable are treated similarly to loans and investments. Accounts receivable balances are reviewed and a provision set up for any amounts that are considered non-collectible. Provisions are subsequently reviewed and increased or decreased as required. Provisions for non-collectible receivables also represent an expenditure and this increases the deficit in the government's financial statements at the time the provision is made.

The provision for loss should be looked at in the perspective of the environment surrounding the loans. That environment includes the fact that the performing loans which were carried in the government's accounts in the late 1980s were sold to a financial institution in a transaction to realize their cash value. The majority of the remaining loans, other than mortgages to individuals, were made to organizations whose lack of borrowing power was a criterion in determining their eligibility for a loan from government, and subsequently, were not able to be sold.

Recommendation

The government usually undertakes a review of loans at the end of the fiscal year to determine its valuation allowance. It is our view that the provincial valuation allowance should now be increased substantially and as a result, the deficit for 1991/92.

Exhibit IV is a summary of recommended changes in the loss valuation allowance by expenditure category.

Exhibit IV
Proposed loss valuation increase 1991/1992 ($ millions) as at January 31, 1992

	Total
Accounts receivable	$ 90.3
Loan, advances and other investments	199.5
Guaranteed debt	49.5
	339.3
1991/92 provision already made	23.5
Increase in 1991/92 provision for bad debts	$ 315.8

D. Government policies and practices

1. The approval process

Program loans and investments are a category of disbursement made by the government under the authority of certain empowering statutes.

The overriding control over the authority to make loans and investments from the Consolidated Revenue Fund is set out in Section 37(1) of the Financial Administration Act (FAA) which states:

"Loans, advances and equity investments

37. (1) A power under an enactment to make loans, advances or direct equity investments from the consolidated revenue fund shall, notwithstanding any other enactment, not be exercised by the government except by order of or in accordance with directives of the Lieutenant Governor-in-Council on the recommendation of the Minister of Finance and Corporate Relations."

The general principle contained in Section 37(1) of the FAA has been used to develop operating policies and guidelines governing the administration and control of loans and investments. These policies and guidelines deal with such issues as objectives and policy on specific matters. It should be noted however, that a major source of loans, the Industrial Development Incentive Act, is specifically excluded from the operation of Section 37 of the FAA.

Loan guarantees have a similar overriding authority, which is contained in Section 56(8) of the FAA. The Minister of Finance and Corporate Relations is required annually to place before the Legislative Assembly a report listing the guarantees and indemnities approved by the Lieutenant Governor in Council or the Treasury Board during the preceding year. The regulations set out the terms under which an indemnity or guarantee may be given by the government. A guarantee may be authorized in one of two ways:

- If prior written approval has been given by the Minister of Finance and Corporate Relations, or

- Where the liability of the government under the guarantee is limited:

  i) to $100,000 or less if approved by the Minister responsible for administration of the relevant Act or program.

  ii) to an amount that exceeds $100,000 but does not exceed $1 million, if prior approval of Treasury Board has been obtained; and

  iii) to an amount that exceeds $1 million or is unlimited if prior written approval of the Lieutenant Governor-in-Council, after consultation with Treasury Board, is obtained.

  An indemnity may be authorized either by the Minister of Finance and Corporate Relations or by a designated Treasury Board staff member on the giving of certain written assurances.

All the loans we examined had been made in accordance with the legislation and approval process outlined above.

2. Credit granting function

The control over the granting of credit is principally an issue in commercial loan circumstances. It is somewhat analogous to the credit control function within a bank. The theory of effective credit control requires an independent party to review requests for funds and to provide an objective critique of the benefits and risks associated with the proposed loan.

The Financial Administration Act makes the Minister of Finance and Corporate Relations responsible and the role is carried out by Treasury Board.

We encountered a number of loans and investments where the control function and approval process normally exercised by Treasury Board were influenced by elected officials to a greater degree than one might expect. In addition, many of the loans were to organizations in poor financial condition. For example, in the latter part of 1987, the Premier and another cabinet minister had discussions with a manufacturing company who were contemplating moving their operations out of

British Columbia. Subsequent to those discussions, the company requested that the province provide financial assistance. A series of negotiations took place and ultimately the province agreed to purchase $1.5 million of preferred shares to help recapitalize the company. Included in the terms was a pre-disbursement condition that $750,000 of the purchase price would be advanced provided that the province was given a subordinated collateral charge over land owned by the company. By October 1988, all pre-disbursement conditions were satisfied and $750,000 disbursed. The company was placed into receivership by its bank in 1989 and because the bank's security was senior and the value of the assets realized in the receivership were insufficient to payout the bank, the province was unable to recover its investment. Based on our review, it does not appear that the program investment guidelines established by the government were adhered to nor was there an explanation as to why the investment was made when it didn't meet the criteria.

The following is a second example of a loan outside the program guidelines. In this situation, a British Columbia-based manufacturing company approached the government in 1989 requesting an interest free loan of $2.5 million to help modernize its plant. The Province declined to provide the requested assistance but did offer to finance 85 per cent of capital costs to a maximum of $2.1 million, conditional on the company paying a royalty providing a return of approximately 6 per cent to the Province.

The company's request for 100 per cent interest free financing for capital costs was rejected because it did not meet guidelines for the following reasons:

- Financing of 100 per cent is outside the guidelines. Normally only 20 to 50 per cent financing would be considered appropriate.

- The loan was requested on an interest free basis for 5 years which provided a substantial interest subsidy to the company. However, the operating results suggested that the company had a healthy financial position and could probably raise and service the required financing for the project without government assistance.

The Province's offer of 85 per cent financing was not acceptable to the company. In April 1990, the principal shareholder of the company had a meeting with the Premier and in July 1990 a further submission for a $2.5 million interest-free loan was made, which was approved. It does not appear that circumstances had changed from when the earlier request was denied.

The loan examples outlined above had been approved as required by the legislation. They are not illegal loans, nor is the periodic involvement of the elected officials questioned. The examples are provided to illustrate the extent to which several loans do not fit into the established support programs and their advance relied on the direct involvement of an elected official. The involvement of elected officials is appropriate and necessary when unusual advances of strategic importance are to be made. When their involvement is a part of many of the loan decisions, it is more

difficult for the ministry involved to adhere to the established loan criteria. It also means that the availability of financial assistance begins to rely more on the ability of the applicant to contact and get the support of the elected members than the merit of the loan compared to established programs. It also blunts the rigour of the approval process because, if the elected officials are sponsoring the loan, Treasury Board staff is less inclined to carry out the full extent of the review normally performed.

3. Loan Administration Branch

Historically, the government has experienced difficulties in the proper administration of loans and receivables. This was a recurring problem in a number of program ministries. The risks were substantial because many of the program ministries did not have effective collection structures in place. As a result, the Province was vulnerable to losing control over a substantial dollar amount of financial assets. The risk of loss of control is illustrated by the incidence of prescribed debts.

Prescribed debts are debts on which a creditor is prohibited from suing, due to a lack of collection activity. Essentially, a creditor loses the right to collect a debt if no action is taken within a prescribed period of time. The time that must elapse before a debt prescribes is lengthy, usually six years. Therefore, the existence of prescribed debts is a strong indicator of inadequate collection procedures. Unfortunately, substantial prescribed debts were accruing in certain ministries, including the Ministry of Advanced Education, Training and Technology, as well as in the B.C. Housing Management Commission.

In 1989, because of these problems, the Ministry of Finance and Corporate Relations created the Loan Administration Branch and charged it with the mandate of performing loan administration and collection for government as a whole. The mandate also contemplated creation of a centralized system capable of serving the program ministries.

A number of portfolios were transferred from the program ministries to the Loan Administration Branch, to administer and collect the portfolio. This transfer was accomplished through the use of protocol agreements. The Loan Administration Branch entered into protocol agreements with the Ministry of Economic Development, Small Business and Trade, the Ministry of Advanced Education, Training and Technology and the Ministry of Agriculture, Fisheries and Food.

Centralizing portfolio management and collections in one place appears to be generally working, but there have been some difficulties. One of the major ones relates to the lack of standardization of the accounting systems. When the portfolios were first transferred to the Loan Administration Branch, each portfolio was on a different system, with the result that eleven different systems are currently in use. In addition, the data being transferred were in some cases incomplete, with missing files and unreconciled balances. For example, one of the portfolios

transferred had an unreconciled balance of $17.7 million, with the result that the unreconciled balance had to be written off.

The lack of standardization is being partially addressed by the development of a consolidated loan administration computer system. However, it does not appear that this new system is being coordinated with or has an interface to the systems within the program ministries. This seems to be inconsistent with the concept of developing a centralized loan administration function which can be utilized by both the program ministries and the Loan Administration Branch. As a result, there is a real danger of parallel but non-integrated systems frustrating the effective operation of a centralized loan administration function.

A coordinated system that supported information exchange would prevent the problem of companies "double-dipping", i.e., receiving assistance from two different government organizations without the organizations knowing of each other's activity.

Another obstacle preventing effective, centralized portfolio management is the lack of accountability in portfolio administration. As mentioned, the transfer of responsibility is accomplished through the use of protocol agreements. However, in our review, we encountered circumstances where there were differences of interpretation of responsibility between the program ministry and the Loan Administration Branch. As a result, there is a lack of clear accountability in respect of the administration and collection of the portfolio and a risk that these organizations could be working at cross purposes.

4. Pay out of guarantees

Loan guarantees are used extensively in certain government programs. Examples of their use include the B.C. Student Assistance Program run by the Ministry of Advanced Education, Training and Technology and the use of commercial guarantees by the Ministry of Economic Development, Small Business and Trade. Conditions for payout of guarantees vary from straightforward to quite complex. As an example, payouts under the B.C. Student Assistance Program are straightforward, as the triggering event is the default by the student to the bank, which entitles the bank to call on the government guarantee. In this case, the control over the guarantee payout is a simple administrative one.

On the other hand, commercial guarantees can be much more complex. Generally speaking, the commercial lender is responsible for monitoring the conduct of the borrower and is only entitled to call on the government guarantee under certain conditions. The commercial lender therefore has a responsibility to properly monitor the borrower and is only entitled to call upon the guarantee if it has fulfilled this responsibility. If a default occurs, and provided the commercial lender has properly carried out its responsibility, the lender will be able to call upon the government guarantee.

To decide whether or not to pay out under a guarantee is a time consuming exercise. Historically, this was not done effectively within specific ministries. However, with the creation of the Loan Administration Branch, greater scrutiny was paid to loan guarantee payouts. While this has improved the situation, it is our view that controls over payouts of guarantees should be further enhanced. As a point of comparison, the system requires a review of circumstances by Treasury Board before the granting of the loan guarantee. However, we did not observe a similar system when dealing with loan guarantee pay outs.

5. Evaluation of programs

Financial controls over loans and loan guarantees consist of two functions:

i) The control over the development of programs involving financial assistance. This function includes the post evaluation of programs.

ii) The control over disbursements made under the programs.

For the most part, the focus of government appears to be on the control over disbursements made under the programs, with insufficient emphasis placed on the review of programs once they are up and running.

Program evaluations are made in the Ministry of Economic Development, Small Business and Trade of loans under shared federal/provincial programs on a regular basis. External consultants are often utilized in the review process, thus adding to the objectivity of the review.

However, there does not seem to be a similar evaluation of the "ad hoc" loans, being those which do not fit into a program. This is particularly significant given the fact that "ad hoc" loans are quite often very large. For example, the Loan Administration Branch recently reviewed a number of large "ad hoc" loans with a view to determining the expected loss due to non-collection of these loans. As a result of this review, the Office of the Comptroller General confirmed the necessity for an additional provision. Included in this provision were three "ad hoc" loans totalling $87 million for which a 100 per cent provision is recommended because they are considered to be uncollectible.

Effective financial controls should include evaluation of the programs making these "ad hoc" loans. Where practical, the programs should be developed so that the number of "ad hoc" loans is reduced.

Similar program review would be useful in the Ministry of Advanced Education, Training and Technology. The amount of government loan guarantees under the B.C. Student Assistance Program is significant and increasing rapidly. Under the existing loan remission program, the government's liability is also increasing rapidly because students will be able to apply for loan remission and the

government will be required to repay the bank on behalf of the graduating students. Because of the size and growth of this program, a review is warranted.

6. Recommendations

a) Credit granting function

Assistance programs should be reviewed and their criteria assessed with the objective of amending their design so that they are able to meet the majority of assistance situations that the government wants to address with the minimum use of "ad hoc" loans. The design should also minimize the need for involvement of elected officials in the loan application process.

b) The Loan Administration Branch

i) Consolidated Computer System

A new consolidated system to administer loans is being developed in the Ministry of Finance and Corporate Relations but there is no agreement to fully coordinate the newly developed system with the program ministries. We recommend that the systems in program ministries relating to loan portfolios be integrated with the computer system being developed by the Loan Administration Branch. Ultimately, the consolidated computer system should be integrated with the program ministry systems.

ii) Administration of Portfolios and Accountability

The lack of clear accountability for aspects of the administration of loans should be addressed and resolved through the protocol agreements and the arrangements developed from time to time.

c) Pay Out of Guarantees

In our view, financial controls over guarantee pay outs are as critical as controls over the provision of the guarantee. If the government intends to continue it's policy of providing commercial guarantees, it should develop a methodology for reviewing guarantee pay outs to ensure that they occur only when warranted.

d) Evaluation of Programs

Regular program evaluations should be conducted of all loan and assistance programs to ensure that they are meeting design criteria and intended procedures are being followed. In particular, "ad hoc" loans and the B.C. Student Assistance Program warrant a detailed review.

E. Issues

1. Loans or grants

Prior to 1986, government policy on financial incentive programs favoured the use of grants. In 1986, there was a shift in policy. Loans became the favoured means of financial incentives. In many cases, the loan programs that were developed included significant concessionary terms, often expressed by reduced interest rates or long repayment terms. In addition, while many programs require proper security to support the loans, the security taken is often inadequate or the nature of it is such that it does not effectively protect the Province's position, should the loan default. To provide an example of these concessionary aspects, we set out below a description of a loan which we noted during our review.

In 1990, cabinet approved the provision of financial assistance to a mining company to construct an access road to a mine. Negotiations between the Province and the company were protracted and the eventual form of assistance was a zero percent interest rate loan. The loan had the following concessionary aspects:

a) Zero percent interest rate

The loan was approved at a zero percent interest rate. The loan agreement did have a provision whereby the Province could earn a return, but it was dependent on user fees being earned from industrial users of the roads. However, the road is in a remote area and there is no evidence that there are other viable mining or logging businesses that would use the road and pay user fees. As a result, it is highly unlikely that the province will earn a return from the road.

b) Repayment terms

The loan was expected to be repaid from user fees being earned from industrial users of the road. As discussed above, there is no evidence to suggest that other businesses would use the road and pay user fees. As a result, it appears highly unlikely that the loan will be repaid from revenue generated from the road. In this case, the Office of the Comptroller General concluded that a 100 per cent provision would be required against this loan when it was eventually paid out.

During our review, we encountered a number of loan programs that are expected to incur high losses. These are listed in Exhibit V. In our view, these high anticipated losses are a strong indication that many of the loans are in fact more in the nature of a grant, i.e., they are not expected to be recovered. This is further supported by the concessionary terms of the loans and the inadequate security.

Exhibit V
A selection of loan programs with projected bad debt percentages

Program	Projected Bad Debt Percentage
Ministry of Agriculture, Fisheries and Food	
Agriculture Incentive Program	75
Ministry of Advanced Education, Training and Technology	
B.C. Student Assistance Program (defaulted guarantees)	100
Ministry of Economic Development, Small Business and Trade	
"Ad Hoc" Loans	69
Job Protection Program	100
Industrial Development Subsidiary Agreement Revolving Fund	38
Small Business Assistance Program	10
Travel Industry Development Subsidiary Agreement	40
Business Expansion Program	36
Tourist Development Agreement	11
Small Manufacturers' Incentive Program	25
Industrial Development Assistance Program	4
Small Business Incentive Program	11

Accounting for loans that are effectively grants understates the true extent of government expenditures at the time of their advance because loans are treated as financing transactions and excluded from being counted as expenditures in the government accounts. In addition, significant resources are still devoted to administering "loan" portfolios. This does not seem sensible if the loan is not likely to be recovered, although the disbursement and administration of grants still necessitates some administrative effort. A latter section in this report discusses the "hidden costs" of administering the portfolios.

2. Loan guarantees and visibility in accounts

Loan guarantee programs have increased significantly in the past few years. Their use appears to coincide with the policy change in the choice of financial incentives away from the use of grants and toward the use of loans. For example, the Ministry of Advanced Education Training and Technology provides assistance to many students in advanced education programs by guaranteeing loans made by banks to students who might otherwise be unable to cover the costs of attending school. Guarantees issued under the Student Loan Program are expected to reach $144 million by March 31, 1992.

Similarly, support for economic development is often provided through the use of government loan guarantee assistance. In a number of cases, government loan guarantees are used where normal commercial lenders will not advance funds, due to the perceived high risk. Government loan guarantees are provided to encourage commercial lenders to advance funds in higher risk lending situations.

A number of ministries have issued loan guarantees. To illustrate the magnitude of these, Exhibit VI sets out a sample of these categorized by ministry.

Unfortunately, loan guarantees are not highly visible in the government accounts. They are disclosed only by way of notes to the statements and are not reflected directly in the accounts except for valuation allowances made where probable losses can be reasonably estimated. Otherwise, they are reflected directly in the government accounts only to the extent of estimated pay outs.

Our review gave us the impression that loan guarantees were favoured over direct advances because they were somewhat less visible in the government accounts and did not increase the government's borrowing. However, it is clear that the government is still incurring an obligation, whether the government provides a loan guarantee or gives a direct loan or grant. This point is reinforced by observing the high projected payout for a number of the loan guarantee programs. The Loan Administration Branch estimates that the pay out percentage for commercial guarantees is approximately 54 per cent. Exhibit VI sets out examples of loan guarantee programs with estimated pay out ratios.

Exhibit VI
Examples of loan guarantees at October 31, 1991 ($ millions)

Ministry	Loan Guarantees	Expected Payout Percentage
Advanced Education, Training and Technology		
B.C. Student Assistance Program	$ 122.4	25
Student Venture Loans	1.0	100
Agriculture, Fisheries and Food		
Agriculture Incentive Program	6.1	34
Economic Development, Small Business and Trade		
Ad Hoc	13.4	75
Regional Seed	1.8	75
Small Business Assistance	0.8	75
Job Protection	5.2	75
Finance and Corporate Relations (as at June, 1991)		
Home Mortgage Assistance Program	236.4	1
B.C. Second Mortgage Program	136.7	3

Generally speaking, loan guarantees are structured to provide a profit for the commercial lender, whereas the Province earns no profit in providing the guarantee but has all the risk if the commercial lender calls on the guarantee. As a result, the Province has the risk of loss but avoids the need to increase borrowing requirements while the commercial lender handles the administration.

A problem with commercial loan guarantees is that they are difficult to monitor. The Province is expecting the commercial lender to monitor the performance of the borrower, but, in practice, the commercial lenders are relying principally on the Province's guarantee and therefore, do not monitor the borrower as aggressively as if they had a risk of loss on the loan. Furthermore, there is a tendency for the Province to pay out automatically under the loan guarantee because it is time consuming to check whether or not the commercial lender has met the conditions required. The controls over payout of guarantees were tightened with the creation of the Loan Administration Branch, but limited resources make the control over pay outs difficult to maintain.

Unlike commercial guarantees, the government does not have an established organization to deal with student loan applications, nor does government have an organization set up to administer and collect a large number of small loans. There is a greater rationale therefore, for the government to be involved in a student loan guarantee program rather than providing direct student loans. Under existing accounting policy, only the current year's expenditure for loan remission is recognized in the government accounts. However, because a large number of students are automatically eligible for loan remission upon graduation, there is a large future, direct liability. The information needed to accurately calculate this future liability is not presently available, but a rough estimate suggests that the future liability, if the remission program continues, could be as high as $40 million.

3. Appropriate use of forgivable debt

The Ministry of Advanced Education, Training and Technology is involved in providing financial assistance to B.C. residents otherwise unable to reach their educational goals because of financial limitations. This is provided by the British Columbia Student Assistance Program where guarantees expected to total $144 million at March 31, 1992 are projected.

The British Columbia Student Assistance Program is run in conjunction with the Canadian Student Loan Program, a federal program. In summary, a student receives a contribution by way of loan from the federal and provincial governments. Once the loans are approved and loan documents prepared by the Ministry of Advanced Education, Training and Technology, the cash is advanced by a bank or credit union. The loans are guaranteed by the federal and provincial governments, who pay interest charges to the bank while the student is enrolled and for an additional six month period after the student leaves full-time studies, at which time students are expected to begin repaying the loan and interest.

The B.C. Student Assistance Program is a needs-based program. In order to be eligible for a loan, the student must establish financial need, as determined by federal and provincial criteria.

Both the federal and provincial programs have a limit on the maximum lifetime loan assistance. The cap on the federal program is between $15,000 and $40,000 depending on whether the student is achieving an undergraduate or post-graduate degree. The provincial cap is $30,000.

The B.C. Student Assistance Program has a policy of loan remission. Loan remission is a program to forgive outstanding student loans in excess of levels considered manageable. The current level of debt considered manageable is $13,000. Amounts above this are a grant, given retroactively to students, providing they graduate. It is important to note that loan remission is different from the loan program itself because it is not needs-based. It is given to an eligible student, regardless of the student's financial position at graduation, and regardless of the graduating student's future earning capacity. It is also important to note that loan remission is applied first to B.C. Student Loans and any remaining balance applied to reduce the outstanding federal loans.

We have several concerns about the current remission program.

1. Loan remission is retroactive, universal and can be substantial. It does not take into account the future earning capacity of the student. The needs-based administrative structure to establish eligibility for the loan does not seem to relate to the retroactive grant which is not needs-based.

2. Loan remission provides an incentive for a student to borrow the maximum possible. Providing the student graduates, and regardless of the amount the student owes, loan remission will reduce the student's obligation to a base amount of $13,000.

3. Loan remission is provided independent of the conduct of the student in respect of the remaining debt. If the student receives the maximum loan remission but subsequently defaults on the remaining loan balance, the only amount that is claimed by the province is that remaining balance.

4. Loan remission pays down the provincial student loan first, leaving the federal loan outstanding. Sharing of that cost with the federal government would seem more reasonable.

An example of the problems inherent in the loan remission program is illustrated by the following specific situation which we encountered during our review.

In 1985, a husband and wife began taking courses which would lead to teaching degrees. They had three dependent children and qualified under the Canadian Student Loan Program and the B.C. Student Assistance Program. Both of these programs are needs-based programs. From 1985 to early 1991, when they graduated, they borrowed under the B.C. Student Loan Program. Their combined borrowing at the time of graduation was $117,000.

Both qualified for loan remission. Each of them made application, at that time, for loan remission and each of them received a loan remission credit of $27,262, for a combined credit of $54,524.

Under the B.C. Student Assistance Program, a graduating student is required to commence repayment 6 months after graduation. The date that they were to have commenced repayment was, therefore, towards the end of 1991. After receiving the

credit for loan remission, Mr. owed $30,000 and Mrs. owed $27,000 under the Canadian Student Loan Program and each of them owed $2,738 under the B.C. Student Assistance Program. Both missed the first due payment, and, approximately three weeks later, they each filed an assignment in bankruptcy. The student loans represented the largest proportion of the total debt when they filed for bankruptcy.

Currently, they are employed as teachers with net monthly take-home pay of $3,734. They have three dependents between the ages of 16 and 21. In the normal course of events, they will obtain a discharge of their debts within about six months.

4. Hidden costs in programs

In today's economic environment, it is inevitable that government becomes involved in encouraging business development, often through the use of financial incentives. Similarly, financial incentives are used to influence other types of behaviour, such as encouraging people to obtain advanced education by offering financial incentives if they attend post-secondary institutions. The government may choose from a variety of different financial incentives including tax concessions, concessionary loans and outright grants. Currently, the provincial government relies heavily on the use of loans and loan guarantees. The current policy is the result of a shift away from the use of grants, as grants were considered "hand outs" and their use was not perceived favourably by the public.

During our review, we encountered a number of loans which, in our view, were more similar to grants than loans. The terms of such loans were at times so concessionary, through low interest rates or extended repayment terms, that viewing them as loans rather than grants was difficult to maintain. In addition, underlying assets securing loans often have little realizable value if a default occurs. The high loss projections confirm that many of the loans are in effect grants.

We also observed during our review, that a number of the programs involved loans made to small businesses. This was a reflection of a government policy to encourage the development of small businesses by providing them with a source of capital which was otherwise not available. However, it is difficult to justify the high administration costs associated with making very small loans. For example, during our review, we encountered a loan in the amount of $27,500 which was authorized under the Small Business Incentive Program. This program is a joint federal/provincial program requiring the province to fund one half (i.e., $13,750) of the loan. The purpose of the loan was to set up a small meat processing business which would provide employment for a total of two people, including the principal of the company. The management of the company was overly optimistic and although the loan was made, the company never started operations due to poor management and lack of working capital.

Significant costs were incurred to review and process the loan application to advance this loan in a high risk situation. The disbursement and monitoring of grants requires some administrative effort but there are additional "hidden costs" associated with the monitoring and collection effort performed by the Loan Administration Branch.

An important point to note about this example is that there are no minimum amounts before a loan can qualify. Commercial lenders view small loans differently and tend to shy away from small commercial loans unless they are backed by liquid collateral security or financially strong personal covenants. The preference of commercial lenders to avoid inadequately secured small loans is due to the high administrative cost associated with small loans. Generally speaking, the costs of drawing up loan agreements and security documents for small loans is the same as for larger loans. Similarly, the cost of monitoring a small loan is not much different than for a large loan. Furthermore, the costs of collection for a small loan can easily exceed the value of the loan, unless there is liquid collateral securing the loans.

A consequence of changing the policy on financial incentives away from grants has been to increase costs associated with the documentation and administration of the incentive program. For example, the Attorney General is responsible for providing legal services to all ministries in respect of drafting loan agreements and security documents. These costs are not recovered from the borrower nor are they taken into account when the loan is made. In effect, they are a "hidden" cost of the programs. There is a question, therefore, about the benefits of going to the trouble and cost of documenting an advance to a company as a loan, when the loan losses are so high and the related administrative costs significant.

Recommendations

a) Loan guarantees and visibility of accounts

1. In our view, the use of loan guarantees should be re-examined. The review should consider the program objectives and alternatives available, including a sharing of the risk with the commercial lender. For instance, there may well be greater rationale for the government to be involved in a student loan guarantee program than providing direct student loans.

2. Given that a large number of students are eligible for the remission program, we are concerned that the obligation could be understated. In our view, if the remission program continues, it should be reviewed to determine the amount of obligation being incurred and the appropriate amount should be reflected in the public accounts as an expenditure at the time the loan takes place.

b) Appropriate use of forgivable debt

The current student assistance program should be reviewed to achieve greater equity between the federal and provincial share and to identify the changes that might reduce abuses of the assistance plan.

c) Hidden costs of programs

In today's economic environment, it is inevitable that government becomes involved in encouraging business development, often through the use of financial incentives. The government's current policy of providing financial incentives relies heavily on the use of loans and loan guarantees.

We recommend that the policies be reviewed to ensure that hidden administrative costs are considered when choosing the vehicle for program delivery, particularly when small assistance amounts are involved.

F. Accounting policy for concessionary loans

The government is involved in developing programs that make advances which have substantial concessionary terms. These concessionary terms typically take the form of low interest rates and/or very long repayment terms. In our review of the government's portfolio of loans, two categories of loans and investments were identified:

- Loans made under terms which are so concessionary that the substance of the transaction is more in the nature of a grant.

- Loans made under terms that would likely result in the advances being repaid within a reasonable time and with adequate security backing the advance. Any concessionary aspect therefore relates mainly to the difference between a commercial lending rate and the rate charged by the Province.

We propose that new accounting policies be adopted to take into account the different concessionary nature of these two categories of loans. In respect to the first category of loans, we believe that the terms under which these advances are made are often so concessionary that the substance of the transaction is more in the nature of a grant and, therefore, they should be accounted for as a grant.

In respect to the second category, we believe that there is justification to assume that the advances will be repaid. We therefore believe that the appropriate accounting treatment would be to record as an asset the present value of the amount expected to be repaid. The present value would be calculated by applying a market interest rate as a discount factor and calculating the present value taking into account the expected date of repayment. The difference between the amount advanced and the present value of the amount expected to be repaid would then be recognized as an expenditure in the year the advance is made.

The impact of this proposal, if accepted, on the government's financial position would be significant: the total estimated carrying value of concessionary loans at March 31, 1991 exceeded $110 million. Such loans include loans made under the Canada/British Columbia Economic and Regional Development Agreement (ERDA), various ad hoc

loans, venture capital loans advanced by the Discovery Foundation, and advances made to the company building the Vancouver Island gas pipeline, but not including any portion of the Rate Stabilization Facility payable under the pipeline agreement to the company. This loan arrangement is discussed in greater detail in Appendix A.

Our proposed accounting treatment is an attempt to recognize that, with low interest rates and long repayment terms, some loans cannot be considered to have significant value as financial assets.

Adopting this accounting policy would make a significant adjustment to the accumulated deficit, as many loans recorded in the Public Accounts are attributable to prior years. If concessionary loans are accounted for as grants as we recommend, with some projects having a future residual value and the balance having none, an adjustment in the order of $79 million would be made to prior periods.

Similarly, the current year's deficit would be increased by $11 million if this accounting policy was adopted. There are, for example, significant loans to be made by the Ministry of Energy, Mines and Petroleum Resources in respect of the natural gas pipeline to Vancouver Island. It is estimated that loans of $18.4 million, relating to the pipeline, will be made in the year ending March 31, 1992.

In addition, the student loan program provides similar concessions under the remission policy. We estimate that application of the concessionary loans accounting policy to this program would necessitate an adjustment in the order of $30 million to prior periods and up to $10 million would be added to the current year's deficit.

Recommendations

A number of ministries administer loan programs that make advances with substantial concessionary terms.

We believe that new accounting policies should be adopted to take into account the different concessionary nature of the different categories of loans,. In particular, where the terms under which the advances are made are so concessionary that the substance of the transaction is more in the nature of a grant, they should be accounted for as a grant. Where the loan will be repaid but the interest rate is concessionary, or, the conditions of payment are well into the future, only the present value of the amount expected to be repaid should be accounted for as an asset.

This is described in greater detail in the Accounting Policies Issue paper.

Appendix A —Vancouver Island Gas Pipeline

A. Description

In 1988, the federal and provincial governments and Pacific Coast Energy Corporation ("PCEC") reached an understanding regarding funding for the Vancouver Island Gas Pipeline. This understanding was reflected in a Statement of Principles between the two governments signed on September 22, 1988.

In November 1988, PCEC applied for an Energy Project Certificate with respect to the proposed natural gas transmission pipeline from Coquitlam to Vancouver Island.

The Terms of Reference for review of the applications by the B.C. Utilities Commission ("BCUC") were issued on December 20, 1988, by the Minister of Energy, Mines and Petroleum Resources and the Minister of the Environment. The Terms of Reference requested that the BCUC report by March 22, 1989.

The hearing was scheduled in three phases as follows:

1. Facilities and Capital Costs.
2. Environmental and Socio-Economic Considerations.
3. Markets, Gas Supply and Financial Matters.

The phasing of the hearing was to allow time for PCEC to augment its application with respect to the Phase 3 matters and to permit completion of the Binding Agreement between the two governments.

At the completion of the hearing in late March 1989, the following major items remained outstanding per the BCUC report dated April 6, 1989:

- The inter-governmental binding agreement.
- Gas supply contracts with producers.
- Gas sales contracts with forest companies.
- Wheeling agreement between B.C. Gas and PCEC to transport gas across the B.C. gas system from Huntingdon to Coquitlam.

- Gas storage agreement with Unocal Canada Limited which would permit purchase of gas at an attractive high load factor.

- Westcoast Incentive Tolls agreement subject to approval by the National Energy Board.

- PCEC/Westcoast Operating Agreement.

The hearing was expedited in order to meet a projected in-service date of September 1, 1990, which required commencement of construction by May 4, 1989.

1. Government assistance

The Statement of Principles agreed to by the federal and provincial governments on September 22, 1988, was premised on $150 million support from each government. The federal government was to provide a $100 million capital grant and a $50 million capital loan and the provincial government was to provide a $25 million capital loan, $55 million in customer conversion grants and an estimated $70 million repayable rate stabilization facility in the form of an interest free loan, repayable under prescribed conditions. PCEC was to provide $75 million from debt and equity to the total estimated capital cost of $250 million.

The Commission highlighted the risk to the provincial government as the primary risk taker in connection with the Rate Stabilization Facility ("RSF"). The Commission indicated that in the optimistic case the RSF would not be required and in the worst case it would be approximately $270 million. The base case projection was a $13 million RSF fully repaid in 1997. The report notes that the projections are heavily dependent on oil price forecasts and containment of capital costs, then estimated at $250 million.

The project did not proceed within the timeframe contemplated by the BCUC. In May 1989 an Inquiry was established to review all technical matters relating to routing of the pipeline through and around the Coquitlam watershed and identification of environmental impacts. At the conclusion of public hearings, the Inquiry reported in July 1989. Delays were also caused by the company's difficulty in securing gas supply and industrial customer sign-ups. The company also identified a number of key studies that would have delayed the process and the government agreed to idemnify the company, to protect the schedule, for an amount up to $10 million. Nothing was paid out on this matter.

2. Rate stabilization facility estimates

At the time that the Energy Project Certificate was issued in September 1989, the RSF base case forecast indicated the RSF advances would total $46 million based on a new capital cost estimate of $280 million. This information was the subject of an August 1989 Cabinet submission. It should be noted that at this point two-thirds of the project remained unbid. When the bulk of the bids were received and it was

recognized that the project would extend until August 1991, the cost of the project was in the region of $307.7 million.

In October 1989, prior to entering into the binding agreement with the company and the federal government, additional analysis was carried out by the Ministry of Energy, Mines and Petroleum Resources. This analysis used higher oil and gas prices than the August 1989 analysis and was premised on capital costs of $300 million. The base case RSF advance using these assumptions was $112 million. It is not clear to whom the results of this analysis were presented prior to the signing of the binding agreement.

A summary of the historic estimates and key assumptions is provided in Exhibit A-III. In addition to changes in assumptions, the computer modeling has evolved considerably from small financial spreadsheets with few assumptions to very large models incorporating a large number of minor assumptions. Presently, the model is operated by the BCUC.

B. The binding agreement

The Queen in Right of Canada and British Columbia and Pacific Coast Energy Corporation entered into a binding agreement with respect to financing of the pipeline on November 3, 1989. The authority to enter into this agreement and the essential obligations of the province are provided for in the Vancouver Island Natural Gas Pipeline Act. The statute was assented to July 20, 1989 and came into force November 8, 1989.

The agreement provided for payment of up to $175 million of eligible capital costs by the federal and provincial governments. These payments were for $100 million non-repayable contribution and a $50 million repayable contribution by the federal government and a $25 million repayable contribution by the provincial government. The company would finance $75 million, or 30 per cent of the project cost, assuming that the capital cost of the project was $250 million.

At the time of signing this agreement, its terms no longer reflected the original intention of the governments that their contributions would be equal in absolute dollars.

The original intention of the governments in absolute dollars may be summarized as follows:

	Canada	British Columbia
	($ millions)	
Non-Repayable Contribution	100	–
Repayable Contribution	50	25
Repayable Rate Stabilization Facility	–	70
Conversion Grants	–	55
	150	150

At the date of signing of the agreement, the estimates were based on a projected capital cost of $300 million and were as follows:

	Canada	British Columbia
	($ millions)	
Non-Repayable Contribution	100	–
Repayable Contribution	50	25
Repayable Rate Stabilization Facility	–	112
Conversion Grants	–	55
	150	192

It should be noted that in either of these estimates the net present value cost to British Columbia is less than that to Canada.

C. The rate stabilization facility

The province is required by the terms of the agreement to make advances to the Corporation equal to the Operating Deficits incurred in the first ten years from the start-up date and any subsequent year which commences before the sooner of:

- The twentieth anniversary of the start-up date.
- The end of the first two consecutive fiscal years for which the Interest Coverage Test is satisfied and which follow repayment of the other Repayable Contributions.

The Interest Coverage Test is met when net income before income taxes and interest less any Operating Deficit is 1.9 times greater than interest expense.

Operating Deficits are the amount by which the following costs exceed total revenues:

- Cost of natural gas purchased and resold.
- Cost of service incurred to supply natural gas to the pipeline including storage costs.
- The cost of service as allowed by the British Columbia Utilities Commission.

The Commission establishes the sales and transportation rates and tolls to be charged to customers in consideration of maximizing operating surpluses or minimizing operating deficits and considering the availability of alternative fuels and their prices.

The allowable cost of service is based on the following:

- No depreciation for the first three years following start-up and straight-line depreciation over forty years thereafter.

- A return on the equity component of the rate base as determined by the BCUC and a reduced return in equity for the first three years (as set out in the agreement).

- Operating expense including any interest paid on the Canada and British Columbia repayable contributions.

The calculation of the rate base has still not been finalized as the costs exceed $250 million. It has to be determined which of the incremental costs were attributable to actions taken by Canada or British Columbia which were directed at the pipeline, and included in the rate base.

The difficulty in properly estimating the ultimate advances under the RSF therefore hinges on the degree of certainty surrounding all of the factors required to estimate the operating deficit.

The key factors inherent in the RSF estimates are as follows:

1. Construction costs

A major component of the calculation of projected RSF advances is the cost of construction and its impact on the rate base. The estimated construction costs at the application hearing was $250 million. Construction costs are currently estimated to be in the region of $356 million. At the time of entering into the binding agreement with the company and the federal government the estimated construction costs were $280 million.

In order to illustrate the sensitivity of the model to increases in construction costs, the BCUC ran the model using the following sets of assumptions

	($millions)		
	I	II	III
Capital Cost	$355.0	$280.0	$280.0
Equity	$40.0	$26.3	$37.0
Return on Equity after Year 3	14.5%	14.5%	14.5%
Oil Price		$20 U.S./bbl. + 4%	
Gas Price			
Industrial		$1.10	
Utility		$1.75	
Industrial Sales		14 PJ	
RSF - Peak	$186.0	$80.2	$92.3
RSF - Peak Year	2004	2001	2002

- The first scenario above which utilizes $355 million as the capital cost and $40 million equity is the scenario shown in Exhibit A-III as the August 1991 estimates.

- $280 million was the best estimate of capital cost at the date of issuing the Energy Project Certificate.

- $26.3 million was the equity level assumed in the binding agreement.

- $37 million was the equity level used in the projections at the date of issuing the Energy Project Certificate.

A comparison of I and III is the best one for purposes of isolating the impact on the RSF of the increases in construction costs. As can be seen, the increased construction costs of $75 million (with a small increase of $3 million in the equity assumption) indicate an increase in RSF funding of approximately $94 million.

It is not clear how much of the construction overrun will be included in the rate base but it may reasonably be anticipated that a substantial portion will be. The cost overruns are attributable to approximately 120 changes including inadequate contingency costs attributable to contract rebids necessitated by the delay in commencement of construction, increased requirements to service the pulp mills, incremental costs associated with the underwater portion of the pipeline and other factors.

The Vancouver Island Gas Pipeline Project Monitoring Committee issued its report dated December 1991 in March 1992. The report outlines the cost progression of the project and identifies the major factors which constitute the difference between an estimated construction cost of $280 million at the date of signing of the Binding Agreement and the estimated final cost, per the report, of $353.6 million. According to the report, the difference of $73.6 million is made up of two components as follows:

- Normal engineering net variance items totalling $14.91 million.

- $58.67 million of scope changes from the base date of October 26, 1989.

The variance items totalled $15.9 million against an installation contingency of $1.0 million. Of this amount, $6.6 million related to field inspection overruns attributed by the company to the extended construction schedule in the 1990/91 winter period. $3.0 million related to overruns in the head office and engineering costs. Difficulties and delays in pulp mill agreements and delays relating to construction in the Coquitlam watershed would likely have contributed to the head office overrun.

Of the $70.7 million classified as scope changes, $12.1 million were incorporated in the October 1989 estimate of $280 million. The major components of the changes are:

- $42.2 million identified as construction cost escalation and cost increases resulting from the one year project delay.
- Approximately $10.6 million are identified as costs imposed by the Greater Vancouver Water District or the Municipality of Coquitlam relating to construction in the Coquitlam watershed.
- Approximately $6.8 million required to meet the requirement of the pulp mill agreements.

The overruns in construction costs are discussed in the Monitoring Committee's report and will be the subject of inquiry by the B.C. Utilities Commission in the company's upcoming rate base hearing.

If should be noted that, all other factors being equal, each dollar of incremental construction cost included in the rate base increases the RSF exposure by approximately $1. However, the relationship is non-linear such that the benefit of reduced capital costs is less at lower levels of RSF disbursements. Current estimates of the final cost are about $356 million. The committee's report contains a number of recommendations which would be applicable to future public undertakings of this type.

2. The relative price of natural gas as compared to alternative fuel sources, namely petroleum products

At the B.C. Utilities Commission hearing to review the company's application for an Energy Project Certificate, the Commission duly noted the risk associated with lack of supply agreements and that price increases in excess of projections would flow directly to the Provincial RSF.

The model used at that time assumed that gas producers would receive a minimum price of $1.06/GJ (real 1991 dollars). An additional netback would flow to the producer after government loans were repaid. In the BCUC's base case scenario, this netback did not take effect until 1997. Most producers rejected PCEC's proposal because it did not meet price expectations driven by an optimistic view of the California market and because it was inconsistent with government's gas market deregulation initiative.

Flowback arrangements could not be negotiated with producers and therefore the shift in risk from producers to the government occurred as the price of gas could not be negotiated on the terms originally projected.

The relative heavy and crude oil prices also influence the sales price to industrial customers. As this ratio approaches 0.75:1 the price of gas rises. Ministry staff have indicated that the percentage price increase of heavy oil vis-a-vis crude oil will be mirrored in a rise in gas prices which would reduce the commitment to advance on the RSF.

3. Volume of sales

The volume of industrial sales has exceeded original estimates and therefore volume sales has had a positive effect on the anticipated RSF. Industrial sales account for roughly three quarters of the total volume. Residential take-up has been less than projected but this is offset by better than projected commercial take-up.

According to financial analysis by the BCUC, construction of one gas-fired power generation facility in the pipeline service area, which uses 9 TJ of gas per year, could reduce the peak RSF by $24 million, and would result in a repayment schedule two years shorter.

4. Westcoast transportation tolls

At the date of the application hearing, it was envisioned that the company would obtain incentive tolls for the first three years of operation and the base and optimistic estimates were prepared at that time assuming such incentive tolls would be applied. The National Energy Board turned down the company's request for incentive rates prior to the issue of the Energy Project Certificate. This factor added approximately $9.5 million to the RSF estimate.

D. Start-up

The obligation of the Province to fund operating deficits of the corporation commences on the Start-Up Date. Start-up was January 22, 1992, however, the pipeline has been operating since July 1991 incurring deficits of approximately $2 million per month.

The Province anticipates that approximately $15 million will be advanced in 1991/92, however, this estimate is premised on moving the start-up date from January 1992 to October 1991 which would necessitate an Order-in-Council. The fiscal 1992 deficit estimated by the company is approximately $27 million.

E. 1992 RSF estimates

In February 1992, the BCUC prepared updated estimates of the likely quantum of the RSF. These estimates may be found in Exhibit A-II and are based on updated information with respect to the following key assumptions:

- Capital cost estimates provided by PCEC.
- Operating cost estimates provided by PCEC.
- Gas sales in the residential, commercial and industrial sectors to reflect actual attachments and sales in the first six months of operations.
- Latest forecasts by the Ministry of Energy, Mines and Petroleum Resources with respect to oil and natural gas prices.

The ministry has indicated that the significant increases in these estimates from those forecast in August 1989 are attributable to the construction cost overruns. This view is supportable from all information we have received. In general, the current forecasts of other key assumptions have not changed materially over the forecast period and the changes have been generally offsetting. Industrial load volumes have exceeded original expectations but have been offset by higher operating and maintenance costs.

F. Loan repayment

The loans are repayable in the following priority:

- Government of Canada—$50 million
- Government of British Columbia—$25 million
- Rate Stabilization Facility

Operating surpluses are paid into a trust fund in order to repay the RSF. The RSF is not paid out until the federal and provincial government loans are repaid in full. The federal government loan is to be repaid in five, $10 million installments according to a complicated calculation related to operating surpluses. The provincial government loan is to be repaid, in two, $12.5 million installments according to a similar calculation.

G. Conclusion

The ministry is currently negotiating with PCEC with a view to reducing the exposure and risk associated with the RSF. The basis of this negotiation appears to be certain verbal representations made by the President and Chief Executive Officer of Westcoast Energy Inc. in August 1989 to various representatives of the government including the Minister of Energy, Mines and Petroleum Resources.

The negotiations to date have focused on capping the equity requirement for the project and establishing a return on equity below that permitted by the BCUC for the first five years of the project.

In addition to these negotiations, two other factors could affect the government's RSF risk.

The BCUC has not yet held the hearing required to fix the rate base for the pipeline. The rate base is established by determination of allowable capital costs incurred in construction of the pipeline. Disallowance of some of the capital costs incurred would reduce the rate base and the current estimates of RSF funding requirements. The rate base hearing will likely be held in the summer of 1992.

The third factor which could materially effect the RSF funding requirement is the ability to sell the excess capacity of the pipeline thereby reducing the cost of transportation. There are a number of proposals for power generation on Vancouver Island under review by B.C. Hydro and Power Authority. The earliest date at which such a facility could be built is 1995, however, such a co-generation facility could significantly reduce RSF requirements as shown at Exhibit A-II.

The RSF is not capped under the terms of the Binding Agreement and the Vancouver Island Pipeline Act. Therefore, the ultimate RSF is subject to a wide variety of factors beyond the control of the government. In our view, this risk was clearly identified at all relevant stages of the decision-making process, but due to a variety of factors including construction cost overruns which have escalated from $250 million to at least $356 million, the financial exposure represented by the RSF has increased significantly. Appendices A-II and A-III set out the history and range of RSF estimates produced by the model.

In our view, one appropriate strategy to mitigate the obligation created by the RSF is to pursue concessions on the contracted return on equity, possibly in exchange for government concessions regarding equity levels. It should be noted that government concessions on equity levels should be considered in light of the ability of PCEC to raise financing which is a condition of the loan repayments.

The strategy should also focus on volume generation and methods of satisfying future capacity shortages of B.C. Hydro and Power Authority by development of co-generation projects.

Based on most current estimates and without reflecting any concessions or volume increases which may be achieved, the most likely RSF total advance is $131 million by the year 2001, which would be repaid by the year 2010. The net cost to the province of this scenario (on a present value basis) is in the range of $74 million.

Exhibit A-I
VIGAS—Chronology of major events

September 22, 1988	Statement of Principles between the Governments of Canada and British Columbia and Pacific Coast Energy Corporation.
November, 1988	PCEC application for an Energy Project Certificate.
December 20, 1988	Minister of Energy, Mines and Petroleum Resources issues Terms of Reference for review of the applications by the B.C. Utilities Commission.
April 6, 1989	B.C. Utilities Commission Final Report in the matter of Application by Pacific Energy Corporation for an Energy Project Certificate
May 18, 1989	Appointments by Order in Council of Inquiry Commissioner to examine, document and report all factual information on proposed routing of the pipeline and availability of alternatives.
July, 1989	Report of the Coquitlam Watershed Pipeline Inquiry.
September, 1989	Energy Project Certificate issued.
November 3, 1989	Binding Agreement between the federal and provincial governments and Pacific Energy Corporation.
December, 1989	Commencement of construction.
July, 1991	Energy Operating Certificate applied for but final certificate not yet issued. The enterprise is operating under an interim certificate.
July, 1991	Commencement of operations.
January 22, 1992	Start-up date.

Exhibit A-II
VIGAS—1992 RSF model results

	Base case	Return on equity concessions	BCUC disallows $20 M from rate base	New co-generation project
Key Assumptions				
Oil price	$22.25/bbl (1992) + 1.8% real escalation	$22.25/bbl (1992) + 1.8% real escalation	$22.25/bbl (1992) + 1.8% real escalation	$22.25/bbl (1992) + 1.8% real escalation
Gas price	$1.25/GJ (1992) + 4% real escalation	$1.25/GJ (1992) + 4% real escalation	$1.25/GJ (1992) + 4% real escalation	$1.25/GJ (1992) + 4% real escalation
Annual industrial sales	14.6 PJ/year	14.6 PJ/year	14.6 PJ/year	14.6 PJ/year
Capital costs allowed for rate base	$355M	$355M	$335 M	$335M
Equity	$40M	$40M	$40M	$40M
Return on equity concession	No	1992 8.5% 1993 10.5% 1994 11.5% 1995 12.0%	1992 8.5% 1993 10.5% 1994 11.5% 1995 12.0%	1992 8.5% 1993 10.5% 1994 11.5% 1995 12.0%
New Gas Project	No	No	No	8.9 TJ/year Co-generation
Peak RSF	$131 million (2001)	$119 Million (2000)	$104 Million (2000)	$80 Million (1998)
Year repaid	2010	2009	2009	2007
Cost to the province at net present value	$74 million	$70 million	$62 million	
Common assumptions				
Exchange rate ($Cdn per $US)	1992 .87 1993 .85 1994 .85 1995 .82			
Interest rate	1992 8.75% thereafter 10.0%			
Utility volumes	5.2 PJ in 1992 growing on average at 6.6% per year			
Inflation rate	4% p.a.			
Real discount rate	8%			

Exhibit A-III
VIGAS—Pre-1992 RSF model results

Key Assumptions/RSF Estimates	1988 Federal/ Provincial Agreement in Principle	April 1989 BCUC Hearing	August 1989	October 1989	August 1991
Key Assumptions:					
Oil Price	$18 US/bbl (1988)	$20 US/bbl (1991)+4%	$18 US/bbl (1989)	$20.79 US/bbl (1991)+2.9%real inflation	$20 US/bbl. (1991)
Gas Price	$1.06 + net back	$1.06 + net back (2.8% real escalation)	$1.12 + 3% real escalation	$1.36 + 5.2%real escalation	Industrial $1.10 (1991) Utility $1.75 (1991)
Annual Industrial Sales	9.5 PJ	10.8 PJ	10.8 PJ	10.8 PJ	14 PJ
Capital Cost	$250 million	$256 million	$280 million	$300 million	$355 million
Equity	$26.3 million	$28.3 million	$37 million	$43.8 million	$40 million
Peak RSF (Base Case)	$36 million (1995)	$13 million (1994)	$46 million	$112 million (1999)	$186 million (2004)
(Optimistic Case)		$0		$41 million (1997)	
(Pessimistic Case)		$270 Million (2007)		$672 million (2010)	
(Modified Pessimistic)		n/a	n/a	$278 million (2004)	n/a

Note:

The optimistic case is based on more favourable assumptions and the pessimistic case is based on less favourable assumptions than the base case with respect to ***each*** *of the above noted key assumptions.*